DE/AFS/SF

ConAgra Foods
*Lamb Weston*
P.O. Box 489
American Falls, Idaho 83211

TEL: (208) 226-2301
FAX: (208) 226-1304

May 14, 2007

Certified Mail# 7005 1160 0003 4070 3359



Bill Rogers
DEQ Air Quality Division
1410 N. Hilton
Boise, ID 83706

Subject: Air Quality Tier II Operating Permit No. 077-00017 Renewal

Our Tier II Operating Permit No. 077-00017 is expiring at the end of July 2007. We request that the permit be renewed and that the following changes be made in the new permit:

1. Increase Specialized Product Line No. 5 daily production maximum to 160 T/day and annual emissions to 52,770 tons per 12-month period.

   Permit to construct (PTC) forms are attached to cover this addition. Since the changes do not affect fugitive emissions or toxic emissions, the fugitive emissions spreadsheets and toxic emission forms have not been included. The increase is small enough that we do not believe any additional modeling will be required, so those portions of the PTC have not been included.

   The reason for the change is that the potential production on Specialized Product Line No. 5 may be higher than believed when the line was installed. This change will allow increased production on the line without exceeding permit limits. This change will result in a potential increase of 1.45 tons per year PM10 and 0.17 tons per year VOC. These changes are below the 10% significant emissions increase of 1.5 tons per year for PM10 and 4.0 tons per year for VOCs. We believe these increases are below regulatory concern for a permit to construct in accordance with IDAPA 58.01.01.221.01.

   The following Permit Section would be changed:

   **FACILITY-WIDE CONDITIONS (Section 2)**

   Section 2.14, page 7 of 22 – Change the Specialized Product Line No. 5 daily production maximum to 160 T/day and annual emissions to 52,770 tons per 12-month period. The permit section change is shown below:

   - Specialized Product Line No. 5 shall have a total maximum output of ~~130~~ **160** T/day, or ~~42,800~~ **52,770** tons per any consecutive 12-month period.

APPENDIX – EMISSION RATE LIMITS AND EMISSIONS INVENTORY (Section 8)

Tables 8.1 and 8.2, pages 20 and 21 of 22 – See the attached spreadsheets for the proposed changes.

2. We would also like to incorporate changes in accordance with letters dated August 29, 2002 from Richard Elkins, DEQ to Robert Bloom, Lamb Weston and dated September 10, 2002 from Bob Bloom, Lamb Weston to Richard Elkins, DEQ in the permit. The changes are shown below and the letters are attached for reference;

**FACILITY-WIDE CONDITIONS (Section 2)**

Fuel Consumption Monitoring and Record Keeping, Section 2.11, page 6 of 22.

The annual $NO_X$ and CO emissions report should be submitted every January for the previous calendar year.

2.11 The permittee shall calculate monthly the $NO_X$ and CO emissions for the previous 12-month period to ensure $NO_X$ and CO emissions do not exceed 99 T/yr. The records shall be submitted to the Department every 12 months **by January 31**, kept at the facility for the most recent five-year period, and be made available to Department representatives upon request.

**FROZEN FRIED PRODUCT LINE 1 (section 3)**

Operating Requirements, Monitoring Equipment, Section 3.4, page 9 of 22.

The permittee should calibrate, maintain, and operate in accordance with the manufacturers specifications "or the O&M manual".

Scrubbing media flow is not measured. Scrubbing media pressure should be measured in its place.

3.4 Monitoring Equipment

The permittee shall calibrate, maintain, and operate in accordance with manufacturer specifications **or the O&M manual**, the equipment that continuously measures the pressure differential across the air pollution control equipment and the scrubbing media ~~flow rate~~ **pressure** to the air pollution control equipment.

Operating Requirements, Pressure Drop Across Air Pollution Control Devices, Section 3.6, page 10 of 22.

Pressure drop across the air pollution control devices should be maintained within manufacturer specifications "OR" O&M manual specifications.

3.6 Pressure Drop Across Air Pollution Control Devices

The pressure drop across the air pollution control devices shall be maintained within manufacturer ~~and~~ **or** O&M manual specifications. Documentation of both the manufacturer and O&M manual operating pressure drop specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

Operating Requirements, Scrubbing Media Flow Rate, Section 3.7, page 10 of 22.

Scrubbing media pump pressure to the air pollution control devices should be maintained within manufacturer specifications "OR" O&M manual specifications.

3.7 Scrubbing Media ~~Flow Rate~~ **Pump Pressure**

The scrubbing media pump pressure to the air pollution control devices shall be maintained within manufacturer's ~~and~~ **or** O&M manual specifications. Documentation of the manufacturer and 0&M manual operating scrubbing media specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

Monitoring and Record Keeping Requirements, Section 3.9, page 10 of 22.

Pressure drop across the air pollution control device, and the scrubbing pump pressure should be recorded "weekly" instead of daily.

3.9 Air Pollution Control Equipment

The following parameters shall be monitored and recorded during operation as specified below. A compilation of the most recent five years of data shall be kept onsite, and shall be made available to Department representatives upon request.

- Pressure drop across the air pollution control device, once ~~daily~~ **weekly**.
- The scrubbing pump pressure to the air pollution device, once ~~daily~~ **weekly**.
- Maintenance on the air pollution control device and any modifications made to the operating specifications, as performed.

**FROZEN FRIED PRODUCT LINE 2 (section 4)**

Operating Requirements, Fuel Specification, Section 4.4, page 11 of 22.

The fryer is steam heated so "and fryer" should be omitted.

4.4 Fuel Specification

The Frozen Fried Product Line 2, dryer (natural gas-fired) ~~and fryer~~, shall bum natural gas exclusively.

Operating Requirements, Monitoring Equipment, Section 4.5, page 11 of 22.

The monitoring equipment should be calibrated, maintained, and operated in accordance with the manufacturers specifications "or the O&M manual",

4.5 Monitoring Equipment

The permittee shall calibrate, maintain, and operate in accordance with manufacturer specifications **or the O&M manual**, the equipment that continuously measures the pressure differential across the air pollution control equipment and the scrubbing media flow rate to the air pollution control equipment.

Operating Requirements, Pressure Drop Across Air Pollution Control Devices, Section 4.7, page 13 of 23.

Pressure drop across the air pollution control devices should be maintained within manufacturer specifications "OR" O&M manual specifications.

4.7 Pressure Drop Across Air Pollution Control Devices

The pressure drop across the air pollution control devices shall be maintained within manufacturer ~~and~~ **or** O&M manual specifications. Documentation of both the manufacturer's and O&M manual operating pressure drop specifications shall remain onsite at alt times and shall be made available to Department representatives upon request

Operating Requirements, Scrubbing Media Flow Rate, Section 4.8, page 12 of 22.

Scrubbing media flow rate to the air pollution control devices should be maintained within manufacturer specifications "OR" O&M manual specifications.

4.8 Scrubbing Media Flow Rate

The scrubbing media flow rate to the air pollution control devices shall be maintained within manufacturer's ~~and~~ **or** O&M manual specifications. Documentation of the manufacturer and O&M manual operating scrubbing media specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

Operating Requirements, Scrubbing Media Flow Rate, Section 4.9, page 12 of 22.

"Scrubbers" should be changed to "scrubber", since there is only one Ducon scrubber.

4.9 Line 2 shall not be operated without the associated Ducon scrubber~~s~~.

**DEHYDRATED (FLAKE) PRODUCTION LINE: DRUM DRYERS 1 AND 2, KICE FILTER, PNEUMAFIL FILTER, AND MIKRO-PULSAIRE FILTER (SECTION 5)**

Operating Requirements, Pressure Drop Across Air Pollution Control Devices Section 5.8 page 14 of 22

Pressure drop across the air pollution control devices should be maintained within manufacturer's specifications "OR" O & M manual specifications.

5.8 Pressure Drop Across Air Pollution Control Devices

The pressure drop across the air pollution control devices shall be maintained within manufacturer ~~and~~ **or** O&M manual specifications. Documentation of both the manufacturer's and O&M manual operating pressure drop specifications shall remain onsite at alt times and shall be made available to Department representatives upon request

Monitoring and Record Keepers Requirements, Section 5.9, page 15 of 23

5.9 Air Pollution Control Equipment

Pressure drop across the air pollution control device once ~~daily~~ weekly.

**BOILER NO. 1, BOILER NO. 2, BOILER NO. 3, BOILER NO. 4, AMUS, AND SPACE HEATERS (SECTION 6)**

Add the following to the permit:

6.3 Fuel Burning Requirements

Construction on the ability to burn alternative fuels has ceased. Lamb-Weston would like to continue to have the option to burn alternative fuels in the future if the need arises. If the need to burn alternative fuels arises in the future, Lamb-Weston will complete construction.

**SPECIALIZED PRODUCT LINE 3 AND LINE 5 (SECTION 7)**

Monitoring and Record Keeping Requirements, Air Pollution and Control Equipment Section 7.8 page 18 of 22

Pressure drop across the air pollution control device should be recorded "weekly" instead of daily.

7.8 Air Pollution Control Equipment

The scrubbing pump pressure to the air pollution device once ~~daily~~ weekly.

Please contact me at (208) 226-2301 extension 63400 if you have any questions.
Sincerely,

Bob Bloom
Accounting/Services Manager
Lamb-Weston
American Falls, Idaho

Attachments



LambWeston.

ConAgra Foods Packaged Foods Co.
dba Lamb-Weston
American Falls, Idaho
Air Quality Tier II Operating Permit #077-00017
Renewal 5-14-07

A. PTC Application Cover Sheet-Form CS

B. PTC Application General Information-Form GI

C. PTC Application Federal Requirements Applicability-Form FRA

D. PTC Application Emission Unit General-Form EUO Line 5 Fryer 1

E. PTC Application Emission Unit General-Form EUO Line 5 Fryer 2

F. PTC Application Scrubber Control Equipment-Form SCE

G. PTC Application Emission Unit General-Form EUO Line 5 Retrograde

H. Letter from Lamb-Weston to IDEQ requesting changes to the July 31, 2002 Air Quality Tier II Operating Permit #77-00017

I. Letter from Rick Elkins of the IDEQ concurring with proposed changes

J. Appendix

- Summary of facility wide emission for criteria pollutants-point sources
- Summary of emission increases
- Table 8.1 proposed emission rate limits
- Process Estimated Emissions for Table 8.1
- Permitted Fuel Burning (calculations for table 8.1)
- Table 8.2 proposed emission inventory based on PTE
- Process PTE (calculations for Table 8.2)
- Permitted Fuel Burning PTE (calculations for Table 8.2 )

**DEQ AIR QUALITY PROGRAM**
1410 N. Hilton, Boise, ID 83706
For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 2
02/13/07

*Please see instructions on page 2 before filling out the form.*

| DEQ USE ONLY |
|---|
| **Date Received** |
| RECEIVED<br>MAY 18 2007<br>DEPARTMENT OF ENVIRONMENTAL QUALITY<br>STATE AQ PROGRAM |
| **Project Number** |
| **Payment / Fees Included?** Yes ☐ No ☑ |
| **Check Number** |

## COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER

| | | | |
|---|---|---|---|
| 1. Company Name | Conagra Foods Packaged Food Company | | |
| 2. Facility Name | American Falls | 3. Facility ID No. | 077-00017 |
| 4. Brief Project Description - One sentence or less | Increase Line 5 Production | | |

## PERMIT APPLICATION TYPE

5. ☐ New Facility ☐ New Source at Existing Facility ☐ Unpermitted Existing Source
☒ Modify Existing Source: Permit No.: T2-040324 Date Issued: March 8, 2005
☐ Required by Enforcement Action: Case No.: _____

6. ☒ Minor PTC ☐ Major PTC

## FORMS INCLUDED

| Included | N/A | Forms | DEQ Verify |
|---|---|---|---|
| ☒ | ☐ | Form GI – Facility Information | ☐ |
| ☒ | ☐ | Form EU0 – Emissions Units General | ☐ |
| ☐ | ☒ | Form EU1 - Industrial Engine Information<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form EU2 - Nonmetallic Mineral Processing Plants<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form EU3 - Spray Paint Booth Information<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form EU4 - Cooling Tower Information<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form EU5 – Boiler Information<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form HMAP – Hot Mix Asphalt Plant<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form CBP - Concrete Batch Plant<br>Please Specify number of forms attached: _____ | ☐ |
| ☐ | ☒ | Form BCE - Baghouses Control Equipment | ☐ |
| ☒ | ☐ | Form SCE - Scrubbers Control Equipment | ☐ |
| ☒ | ☐ | Forms EI-CP1 - EI-CP4 - Emissions Inventory– criteria pollutants<br>(Excel workbook, all 4 worksheets) | ☐ |
| ☐ | ☒ | PP – Plot Plan | ☐ |
| ☐ | ☒ | Forms MI1 – MI4 – Modeling<br>(Excel workbook, all 4 worksheets) | ☐ |
| ☐ | ☒ | Form FRA – Federal Regulation Applicability | ☐ |

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**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 3
03/26/07

*Please see instructions on page 2 before filling out the form.*

***All information is required. If information is missing, the application will not be processed.***

| IDENTIFICATION | |
|---|---|
| 1. Company Name | Conagra Foods Packaged Food Company |
| 2. Facility Name (if different than #1) | American Falls |
| 3. Facility I.D. No. | 077-00017 |
| 4. Brief Project Description: | Increase Line 5 Production |
| **FACILITY INFORMATION** | |
| 5. Owned/operated by: (√ if applicable) | ☐ Federal government ☐ County government ☐ State government ☐ City government |
| 6. Primary Facility Permit Contact Person/Title | Robert Bloom / Services Manager |
| 7. Telephone Number and Email Address | (208) 226-2301 Bob.Bloom @Conagrafoods.com |
| 8. Alternate Facility Contact Person/Title | |
| 9. Telephone Number and Email Address | |
| 10. Address to which permit should be sent | P.O. Box 489 |
| City/State/Zip | American Falls ID 83211 |
| Equipment Location Address (if different than #10) | |
| 13. City/State/Zip | |
| 14. Is the Equipment Portable? | ☐ Yes ☒ No |
| 15. SIC Code(s) and NAISC Code | Primary SIC: 2037 Secondary SIC (if any): NAICS: |
| 16. Brief Business Description and Principal Product | Production of Frozen and Dehydrated Potato Products |
| 17. Identify any adjacent or contiguous facility that this company owns and/or operates | |
| **PERMIT APPLICATION TYPE** | |
| 18. Specify Reason for Application | ☐ New Facility ☐ New Source at Existing Facility ☐ Unpermitted Existing Source<br>☒ Modify Existing Source: Permit No.:____ Date Issued: ____<br>☐ Permit Revision<br>☐ Required by Enforcement Action: Case No.:____ |
| **CERTIFICATION** | |
| IN ACCORDANCE WITH IDAPA 58.01.01.123 (RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO), I CERTIFY BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THE DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE. | |
| 19. Responsible Official's Name/Title | Robert Schutte / Operations Manager |
| 20. RESPONSIBLE OFFICIAL SIGNATURE | Robert Schutte Date: 5/14/07 |
| 21. ☒ Check here to indicate you would like to review a draft permit prior to final issuance. | |

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# PERMIT TO CONSTRUCT APPLICATION

Revision 3
03/26/07

*Please see instructions on page 2 before filling out the form.*

| IDENTIFICATION | | |
|---|---|---|
| Company Name:<br>Conagra Foods Packaged Food Company | Facility Name:<br>American Falls | Facility ID No:<br>077-00017 |
| Brief Project Description: Increase Line 5 Production | | |

## APPLICABILITY DETERMINATION

| | | |
|---|---|---|
| 1. Will this project be subject to 1990 CAA Section 112(g)? (Case-by-Case MACT) | ☒ NO | ☐ YES*<br>* If YES, applicant must submit an application for a case-by-case MACT determination [IAC 567 22-1(3)"b" (8)] |
| 2. Will this project be subject to a New Source Performance Standard? (40 CFR part 60) | ☒ NO | ☐ YES*<br>*If YES, please identify sub-part: ____ |
| 3. Will this project be subject to a MACT (Maximum Achievable Control Technology) regulation? (40 CFR part 63)<br>THIS ONLY APPLIES IF THE PROJECT EMITS A HAZARDOUS AIR POLLUTANT | ☒ NO | ☐ YES*<br>*If YES, please identify sub-part: ____ |
| Will this project be subject to a NESHAP (National Emission Standards for Hazardous Air Pollutants) regulation? (40 CFR part 61) | ☒ NO | ☐ YES*<br>*If YES, please identify sub-part: ____ |
| 5. Will this project be subject to PSD (Prevention of Significant Deterioration)? (40 CFR section 52.21) | ☒ NO | ☐ YES |
| 6. Was netting done for this project to avoid PSD? | ☒ NO | ☐ YES*<br>*If YES, please attach netting calculations |

**IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT**

Emissions Unit - General **Form EU0**

**DEQ AIR QUALITY PROGRAM**
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For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 2
02/14/07

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| Company Name: | Facility Name: | Facility ID No: |
|---|---|---|
| Conagra Foods Packaged Food Company | American Falls | 077-00017 |
| Brief Project Description: | Increase Line 5 Production | |

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | |
|---|---|
| 1. Emissions Unit (EU) Name: | LINE 5 FRYER 1 |
| 2. EU ID Number: | LINE 5 FRYER 1 |
| 3. EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source -- Previous Permit #:T2-040324 Date Issued: March 8, 2005 |
| 4. Manufacturer: | FULTON |
| 5. Model: | TTL40 |
| 6. Maximum Capacity: | 80 T/DAY |
| 7. Date of Construction: | 1995 |
| 8. Date of Modification (if any) | |
| 9. Is this a Controlled Emission Unit? | ☐ No ☒ Yes If Yes, Complete the following section. If No, go to line 18. |

## EMISSIONS CONTROL EQUIPMENT

| | | | |
|---|---|---|---|
| 10. Control Equipment Name and ID: | Line 5 Scrubber 1 | | |
| 11. Date of Installation: | 3-1996 | 12. Date of Modification (if any): | |
| 13. Manufacturer and Model Number: | Reyco Type W Roto-Clone | | |
| 14. ID(s) of Emission Unit Controlled: | Line 5 Fryer 1 | | |
| 15. Is operating schedule different than emission units(s) involved?: | ☐ Yes ☒ No | | |
| 16. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐Yes ☒No (If yes, attach and label manufacturer guarantee) | | |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | | | | | | |

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. Emissions Estimated from Source Test. Control Efficiency not Estimated.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | |
|---|---|
| 18. Actual Operation | 7896 HOURS/YEAR |
| 19. Maximum Operation | 8760 HOURS/YEAR |

## REQUESTED LIMITS

| | |
|---|---|
| 20. Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, check all that apply below) |
| ☐ Operation Hour Limit(s): | |
| ☒ Production Limit(s): | LINE 5 MAXIMUM OUTPUT OF 160 T/DAY, OR 52,770 T/YR |
| ☐ Material Usage Limit(s): | |
| ☐ Limits Based on Stack Testing | Please attach all relevant stack testing summary reports |
| ☐ Other: | |
| Rationale for Requesting the Limit(s): | INCREASE FROM CURRENT PERMIT LIMITS. |

Emissions Unit - General **Form EU0**

**DEQ AIR QUALITY PROGRAM**
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For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 2
02/14/07

*Please see instructions on page 2 before filling out the form.*

## IDENTIFICATION

| Company Name: | Facility Name: | Facility ID No: |
|---|---|---|
| Conagra Foods Packaged Food Company | American Falls | 077-00017 |
| Brief Project Description: | Increase Line 5 Production | |

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

| | |
|---|---|
| 1. Emissions Unit (EU) Name: | LINE 5 FRYER 2 |
| 2. EU ID Number: | LINE 5 FRYER 2 |
| 3. EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source -- Previous Permit #:T2-040324 Date Issued: March 8, 2005 |
| 4. Manufacturer: | FULTON |
| 5. Model: | TTL40 |
| 6. Maximum Capacity: | 80 T/DAY |
| 7. Date of Construction: | 1997 |
| 8. Date of Modification (if any) | |
| 9. Is this a Controlled Emission Unit? | ☐ No ☒ Yes If Yes, Complete the following section. If No, go to line 18. |

## EMISSIONS CONTROL EQUIPMENT

| | | | |
|---|---|---|---|
| 10. Control Equipment Name and ID: | Line 5 Scrubber 2 | | |
| 11. Date of Installation: | 8-1997 | 12. Date of Modification (if any): | |
| 13. Manufacturer and Model Number: | Reyco Type W Roto-Clone | | |
| 14. ID(s) of Emission Unit Controlled: | Line 5 Fryer 1 | | |
| 15. Is operating schedule different than emission units(s) involved?: | ☐ Yes ☒ No | | |
| 16. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐Yes ☒No (If yes, attach and label manufacturer guarantee) | | |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | | | | | | |

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. Emissions Estimated from Source Test. Control Efficiency not Estimated.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

| | |
|---|---|
| 18. Actual Operation | 7896 HOURS/YEAR |
| 19. Maximum Operation | 8760 HOURS/YEAR |

## REQUESTED LIMITS

| | |
|---|---|
| 20. Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, check all that apply below) |
| ☐ Operation Hour Limit(s): | |
| ☒ Production Limit(s): | LINE 5 MAXIMUM OUTPUT OF 160 T/DAY, OR 52,770 T/YR |
| ☐ Material Usage Limit(s): | |
| ☐ Limits Based on Stack Testing | Please attach all relevant stack testing summary reports |
| ☐ Other: | |
| Rationale for Requesting the Limit(s): | INCREASE FROM CURRENT PERMIT LIMITS. |

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# PERMIT TO CONSTRUCT APPLICATION

Revision 3
03/26/07

*Please see instructions on page 3 before filling out the form.*

| IDENTIFICATION | | | |
|---|---|---|---|
| **Company Name:** | Conagra Foods Packaged Food Company | **Facility Name:** American Falls | **Facility ID No.:** 077-00017 |
| **Brief Project Description:** | Increase Line 5 Production | | |

| IDENTIFICATION | | | | SCRUBBER | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9 | 10. |
| **Emission Unit** | **EU ID No.** | **CE ID No.** | **Stack ID No.** | **Manufacturer Name** | **Model No.** | **Type** | **Dimensions In Feet (Ht x Dia x L)** | **Water Flow (gpm)** | **Pressure Drop (in $H_2O$)** |
| Line 5 Scrubber 1 | Same | Same | Same | Reyco | Type W Roto-Clone | Spray Chamber | | | |
| Line 5 Scrubber 2 | Same | Same | Same | Reyco | Type W Roto-Clone | Spray Chamber | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

Emissions Unit - General **Form EU0**

**DEQ AIR QUALITY PROGRAM**
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For assistance, call the
**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 2
02/14/07

*Please see instructions on page 2 before filling out the form.*

| IDENTIFICATION | | |
|---|---|---|
| Company Name:<br>Conagra Foods Packaged Food Company | Facility Name:<br>American Falls | Facility ID No:<br>077-00017 |
| Brief Project Description: | Increase Line 5 Production | |

| EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION | |
|---|---|
| 1. Emissions Unit (EU) Name: | LINE 5 RETROGRADE |
| 2. EU ID Number: | LINE 5 RETROGRADE |
| 3. EU Type: | ☐ New Source ☐ Unpermitted Existing Source<br>☒ Modification to a Permitted Source -- Previous Permit #:T2-040324 Date Issued: March 8, 2005 |
| 4. Manufacturer: | NATIONAL DRYER COMPANY |
| 5. Model: | CUSTOM BUILT |
| 6. Maximum Capacity: | 160 T/DAY |
| 7. Date of Construction: | 2000 |
| 8. Date of Modification (if any) | |
| 9. Is this a Controlled Emission Unit? | ☒ No ☐ Yes If Yes, Complete the following section. If No, go to line 18. |

| EMISSIONS CONTROL EQUIPMENT | | | |
|---|---|---|---|
| 10. Control Equipment Name and ID: | | | |
| 11. Date of Installation: | | 12. Date of Modification (if any): | |
| 13. Manufacturer and Model Number: | | | |
| 14. ID(s) of Emission Unit Controlled: | | | |
| 15. Is operating schedule different than emission units(s) involved?: | ☐ Yes ☐ No | | |
| 16. Does the manufacturer guarantee the control efficiency of the control equipment? | ☐Yes ☐No (If yes, attach and label manufacturer guarantee) | | |

| | Pollutant Controlled | | | | | |
|---|---|---|---|---|---|---|
| | PM | PM10 | $SO_2$ | NOx | VOC | CO |
| Control Efficiency | | | | | | |

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

| EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other) | |
|---|---|
| 18. Actual Operation | 7896 HOURS/YEAR |
| 19. Maximum Operation | 8760 HOURS/YEAR |

| REQUESTED LIMITS | |
|---|---|
| 20. Are you requesting any permit limits? | ☒ Yes ☐ No (If Yes, check all that apply below) |
| ☐ Operation Hour Limit(s): | |
| ☒ Production Limit(s): | LINE 5 MAXIMUM OUTPUT OF 160 T/DAY, OR 52,770 T/YR |
| ☐ Material Usage Limit(s): | |
| ☐ Limits Based on Stack Testing | Please attach all relevant stack testing summary reports |
| ☐ Other: | |
| Rationale for Requesting the Limit(s): | INCREASE FROM CURRENT PERMIT LIMITS. |

Lamb Weston

September 10, 2002

CERTIFIED MAIL 7000 0520 0022 1785 8670

Mr. Richard Elkins
Air Quality Science Officer
Idaho Department of Environmental Quality
444 Hospital Way #300
Pocatello, Idaho 83201

RE: Air Quality Tier II Operating Permit #077-00017 Permit Hand Off and Review

Dear Mr. Elkins,

At 10:00 a.m. on September 4, 2002 at Lamb-Weston American Falls, Idaho, there was an Air Quality Tier II Permit #077-00017 hand off and review. The representatives present from the Idaho Department of Environmental Quality (IDEQ) were Richard Elkins - Air Quality Science Officer, and Larry Sims - Air Quality Science Officer. Joining the meeting via telephone was Steven Coe - Air Quality Permit Writer, from the Boise office of the IDEQ. Representatives from Lamb-Weston who were present were Bob Schutte – Operations Manager, John Blair – Engineering Manager, Brian Stoddard – Facility Engineer, and Bob Bloom – Accounting and Services Manager.

The Air Quality Tier II Operating Permit #077-00017 was issued on July 31, 2002. The purpose of this permit hand off and review is to give the IDEQ representatives an opportunity to review the permit terms and requirements with Lamb-Weston. We appreciate your time and professionalism during this review.

During the review, it was requested that I notify you in writing of modifications and clarifications that we discussed during the permit hand off and review.

1) On the cover sheet page, page 1 of 23, it should be stated that this Tier II Operating Permit expires in five years from the date of issuance, or July 31, 2007.

**FACILITY-WIDE CONDITIONS (section 2)**

2) Fuel Consumption Monitoring and Record Keeping, Section 2.11, page 6 of 23.

It was agreed upon that it would be appropriate to send the NOx and CO emissions report into the Department every January for the previous calendar year, with report due January 2003 having data for August 1, 2002 through December 31, 2002.

*Lamb-Weston, Inc., 2975 Lamb Weston Road, P.O. Box 489, American Falls, Idaho 83211*
*Telephone 208-226-2301 • FAX 208-226-2304*

**FROZEN FRIED PRODUCT LINE 1 (section 3)**

3) Operating Requirements, Monitoring Equipment, Section 3.4, page 10 of 23.

It was agreed upon that the permittee shall calibrate, maintain, and operate in accordance with the manufacturers specifications **"or the O&M manual".**

It was agreed upon that the scrubbing media flow rate should be changed to **"scrubbing media pressure"**. Scrubbing media flow is not measured.

4) Operating Requirements, Pressure Drop Across Air Pollution Control Devices, Section 3.6, page 11 of 23.

It was agreed upon that the pressure drop across the air pollution control devices shall be maintained within manufacturer specifications **"OR"** O&M manual specifications.

5) Operating Requirements, Scrubbing Media Flow Rate, Section 3.7, page 11 of 23.

It was agreed upon that the scrubbing media pump pressure to the air pollution control devices shall be maintained within manufacturer specifications **"OR"** O&M manual specifications.

6) Monitoring and Record Keeping Requirements, Section 3.9, page 11 of 23.

It was agreed upon that the a) pressure drop across the air pollution control device, and b) the scrubbing pump pressure to the air pollution device should both be recorded "**WEEKLY**" instead of daily.

**FROZEN FRIED PRODUCT LINE 2 (section 4)**

7) Operating Requirements, Fuel Specification, Section 4.4, page 12 of 23.

It was agreed upon that "and fryer" should be omitted, because the fryer is steam heated and does not directly burn natural gas.

8) Operating Requirements, Monitoring Equipment, Section 4.5, page 12 of 23.

It was agreed upon that the permittee shall calibrate, maintain, and operate in accordance with the manufacturers specifications "**or the O&M manual**".

9) Operating Requirements, Pressure Drop Across Air Pollution Control Devices, section 4.7, page 13 of 23.

It was agreed upon that the pressure drop across the air pollution control devices shall be maintained within manufacturer specifications **"OR"** O&M manual specifications.

10) Operating Requirements, Scrubbing Media Flow Rate, Section 4.8, page 13 of 23.

It was agreed upon that the scrubbing media flow rate to the air pollution control devices shall be maintained within manufacturer specifications **"OR"** O&M manual specifications.

11) Operating Requirements, Scrubbing Media Flow Rate, Section 4.9, page 13 of 23.

It was agreed upon that "scrubbers" should be changed to "scrubber", since there is only one Ducon scrubber.

12) Monitoring and Record Keeping Requirements, Air Pollution Control Equipment Section 4.10, page 13 of 23.

It was agreed upon that both a) the pressure drop across the air pollution control device and b) the scrubbing media flow rate to the air pollution device should be recorded **"WEEKLY"** instead of daily.

**DEHYDRATED (FLAKE) PRODUCT LINE: DRUM DRYERS 1 AND 2, KICE FILTER, PNEUMAFIL FILTER, AND MIKRO-PULSAIRE FILTER (section 5)**

13) Operating Requirements, Pressure Drop Across Air Pollution Control Devices, Section 5.8, page 15 of 23.

It was agreed upon that the pressure drop across the air pollution control devices shall be maintained within manufacturer specifications **"OR"** O&M manual specifications.

14) Monitoring and Record Keeping Requirements, Air Pollution Control Equipment, Section 5.9, page 15 of 23.

It was agreed upon that the pressure drop across the air pollution control device should be recorded **"WEEKLY"** instead of daily.

**SPECIALIZED PRODUCT LINE 3 AND LINE 5 (section 7)**

15) Monitoring and Record Keeping Requirements, Air Pollution Control Equipment, Section 7.8, page 19 of 23.

It was agreed upon that the scrubbing pump pressure to the air pollution device should be recorded **"WEEKLY"** instead of daily.

Mr. Elkins, Lamb-Weston is requesting a written response from you, that you agree to and concur with the above modifications and clarifications to Air Operating Permit #077-00017 issued on July 31, 2002.

Lamb-Weston would like to thank you, Larry Sims, and Steven Coe for all the time and effort that went into this new Air Operating Permit. If you should have any questions please contact me at (208) 226-2301 extension 63400.

Sincerely,

Bob Bloom
Accounting/Services Manager

cc: Mr. Steven Coe
Air Quality Permit Writer
Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706-1290

RGB/lm

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way #300 • Pocatello, Idaho 83201 • (208) 236-6160

Dirk Kempthorne, Governor
C. Stephen Allred, Director

August 29, 2002

Robert Bloom
Services Manager
Lamb Weston Inc.
PO Box 489
American Falls 83211

Subject: Air Quality Tier II/PTC #077-00017

Dear Mr. Bloom:

On September 11, 2002 the Department of Environmental Quality, (DEQ), received Lamb Weston's September 10, 2002 correspondence summarizing the issues discussed and resolved at the permit handoff. DEQ concurs with the information provided which clarifies the requirements of the permit.

I have also included in this correspondence information concerning air quality permit fees. If you have any questions concerning this correspondence please feel free to contact me at (208) 236-6160.

Sincerely,

Richard W. Elkins
Air Quality Science Officer

cc: AFS/Source File (077-00017) Pocatello Source File

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
**Air Permit Hotline - 1-877-5PERMIT**

**PERMIT TO CONSTRUCT APPLICATION**
Revision 3
4/5/2007

*Please see instructions on page 2 before filling out the form.*

| | |
|---|---|
| Company Name: | **Conagra Foods Packaged Food Company** |
| Facility Name: | American Falls |
| Facility ID No.: | 077-00017 |
| Brief Project Description: | Increase Line 5 Production |

**SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES**

| 1. | 2. | 3. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $PM_{10}$ | | $SO_2$ | | $NO_x$ | | CO | | VOC | | Lead | |
| **Emissions units** | **Stack ID** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** |
| **Point Source(s)** | | | | | | | | | | | | | |
| Boiler 1 | | 1.65 | 7.24 | 5.10 | 22.36 | 9.47 | 41.48 | 8.11 | 35.53 | 0.53 | 2.33 | | |
| Boiler 2 | | 0.79 | 3.47 | 2.45 | 10.71 | 9.07 | 39.74 | 3.89 | 17.02 | 0.25 | 1.11 | | |
| Boiler 3 | | 0.78 | 3.44 | 2.42 | 10.61 | 8.99 | 39.36 | 3.85 | 16.85 | 0.25 | 1.10 | | |
| Boiler 4 | | 0.02 | 0.03 | 0.00 | 0.00 | 0.25 | 0.44 | 0.21 | 0.37 | 0.01 | 0.02 | | |
| Line 2 Dryer | | 1.50 | 5.97 | 0.01 | 0.05 | 1.91 | 8.37 | 1.61 | 7.03 | 0.11 | 0.46 | | |
| Line 3 Roaster | | 0.06 | 0.24 | 0.00 | 0.02 | 0.73 | 3.18 | 0.61 | 2.67 | 0.04 | 0.17 | | |
| Line 3 Retrograde | | 0.70 | 2.64 | | | | | | | | | | |
| Line 5 Retrograde | | 0.46 | 1.83 | 0.00 | 0.01 | 0.47 | 2.06 | 0.40 | 1.73 | 0.03 | 0.11 | | |
| Line 1 Dryer | | 2.50 | 9.89 | | | | | | | | | | |
| Flake Dryer 1 & 2 | | 0.13 | 0.53 | | | | | | | | | | |
| Line 1 Reyco Scrubber | | 3.94 | 15.55 | | | | | | | 1.22 | 4.82 | | |
| Line 2 Ducon Scrubber | | 2.13 | 8.39 | | | | | | | 0.66 | 2.60 | | |
| Line 5 Fryer/scrubber 1 | | 0.70 | 2.80 | 0.00 | 0.01 | 0.47 | 2.06 | 0.40 | 1.73 | 0.13 | 0.52 | | |
| Line 5 Fryer/scrubber 2 | | 0.70 | 2.80 | 0.00 | 0.01 | 0.47 | 2.06 | 0.40 | 1.73 | 0.13 | 0.52 | | |
| Kice filter | | 0.07 | 0.29 | | | | | | | | | | |
| Pneumafil filter | | 0.30 | 1.17 | | | | | | | | | | |
| Mikro-Pulsair filter | | 0.15 | 0.58 | | | | | | | | | | |
| AMUs & space heaters | | 0.59 | 1.07 | 0.05 | 0.08 | 7.81 | 14.06 | 6.56 | 11.81 | 0.43 | 0.77 | | |
| name of the emissions unit19 | | | | | | | | | | | | | |
| name of the emissions unit20 | | | | | | | | | | | | | |
| name of the emissions unit21 | | | | | | | | | | | | | |
| **(insert more rows as needed)** | | | | | | | | | | | | | |
| **Total** | | 17.18 | 67.92 | 10.05 | 43.87 | 39.64 | 152.82 | 26.01 | 96.48 | 3.79 | 14.55 | 0.00 | 0.00 |

| | | |
|---|---|---|
| | DEQ AIR QUALITY PROGRAM<br>1410 N. Hilton, Boise, ID 83706<br>For assistance, call the<br>**Air Permit Hotline - 1-877-5PERMIT** | **PERMIT TO CONSTRUCT APPLICATION**<br>Revision 3<br>4/5/2007 |

*Please see instructions on page 2 before filling out the form.*

| | |
|---|---|
| Company Name: | **Conagra Foods Packaged Food Company** |
| Facility Name: | American Falls |
| Facility ID No.: | 077-00017 |
| Brief Project Description: | Increase Line 5 Production |

**SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES**

| 1. | 2. | 3. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $PM_{10}$ | | $SO_2$ | | $NO_X$ | | CO | | VOC | | Lead | |
| **Emissions units** | **Stack ID** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** |
| **Point Source(s)** | | | | | | | | | | | | | |

**Instructions for Form EI-CP1**

**This form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.**

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of all emission units at the facility. This name must match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this point source. In this form, emission rates for a point source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

**NOTE:** Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
**Air Permit Hotline - 1-877-5PERMIT**

**PERMIT TO CONSTRUCT APPLICATION**
Revision 3
4/5/2007

*Please see instructions on page 2 before filling out the form.*

| | |
|---|---|
| Company Name: | Conagra Foods Packaged Food Company |
| Facility Name: | American Falls |
| Facility ID No.: | 077-00017 |
| Brief Project Description: | Increase Line 5 Production |

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES**

| 1. | 2. | 3. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $PM_{10}$ | | $SO_2$ | | $NO_x$ | | CO | | VOC | | Lead | |
| **Emissions units** | **Stack ID** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** | **lb/hr** | **T/yr** |
| **Point Source(s)** | | | | | | | | | | | | | |
| Line 5 Retrograde | | 0.08 | 0.35 | | | | | | | | | | |
| Line 5 Fryer/scrubber 1 | | 0.13 | 0.55 | | | | | | | 0.02 | 0.09 | | |
| Line 5 Fryer/scrubber 2 | | 0.13 | 0.55 | | | | | | | 0.02 | 0.09 | | |
| name of the emissions unit4 | | | | | | | | | | | | | |
| name of the emissions unit5 | | | | | | | | | | | | | |
| name of the emissions unit6 | | | | | | | | | | | | | |
| name of the emissions unit7 | | | | | | | | | | | | | |
| name of the emissions unit8 | | | | | | | | | | | | | |
| name of the emissions unit9 | | | | | | | | | | | | | |
| name of the emissions unit10 | | | | | | | | | | | | | |
| name of the emissions unit11 | | | | | | | | | | | | | |
| name of the emissions unit12 | | | | | | | | | | | | | |
| name of the emissions unit13 | | | | | | | | | | | | | |
| name of the emissions unit14 | | | | | | | | | | | | | |
| name of the emissions unit15 | | | | | | | | | | | | | |
| name of the emissions unit16 | | | | | | | | | | | | | |
| name of the emissions unit17 | | | | | | | | | | | | | |
| name of the emissions unit18 | | | | | | | | | | | | | |
| name of the emissions unit19 | | | | | | | | | | | | | |
| name of the emissions unit20 | | | | | | | | | | | | | |
| name of the emissions unit21 | | | | | | | | | | | | | |
| **(insert more rows as needed)** | | | | | | | | | | | | | |
| **Total** | | 0.33 | 1.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.17 | 0.00 | 0.00 |

| | | |
|---|---|---|
| | DEQ AIR QUALITY PROGRAM<br>1410 N. Hilton, Boise, ID 83706<br>For assistance, call the<br>**Air Permit Hotline - 1-877-5PERMIT** | **PERMIT TO CONSTRUCT APPLICATION**<br>Revision 3<br>4/5/2007 |

*Please see instructions on page 2 before filling out the form.*

| | |
|---|---|
| Company Name: | Conagra Foods Packaged Food Company |
| Facility Name: | American Falls |
| Facility ID No.: | 077-00017 |
| Brief Project Description: | Increase Line 5 Production |

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES**

| 1. | 2. | 3. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $PM_{10}$ | | $SO_2$ | | $NO_x$ | | CO | | VOC | | Lead | |
| Emissions units | Stack ID | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr | lb/hr | T/yr |
| Point Source(s) | | | | | | | | | | | | | |

**Instructions for Form EI-CP3**

**This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with this permit application. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requeste by the IDEQ.**

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this emission unit. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, then, the control efficiency or proposed permit limit(s) may be used in calculating proposed potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

## Lamb-Weston, American Falls
## Proposed Table 8.1 Emission Rate Limits

Changes shown in **BOLD**

| | PM10 | | SO2 | | CO | | VOC | | NOx | |
|---|---|---|---|---|---|---|---|---|---|---|
| | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr |
| Boiler 1 | | | | | | | | | | |
| Boiler 2 | | | | | | | | | | |
| Boiler 3 | | | | | | | | | | |
| Boiler 4 | | | | | | | | | | |
| Line 2 Dryer | 1.50 | 5.97 | | | | | | | | |
| Line 3 Roaster | 0.06 | 0.24 | | | | | | | | |
| Line 3 Retrograde | 0.70 | 2.78 | | | | | | | | |
| Line 5 Retrograde | **0.46** | **1.83** | | | | | | | | |
| Line 1 Dryer | 2.50 | 9.89 | | | | | | | | |
| Flake Dryer 1 & 2 | 0.13 | 0.53 | | | | | | | | |
| Line 1 Reyco Scrubber | 3.94 | 15.55 | | | | | | | | |
| Line 2 Ducon Scrubber | 2.13 | 8.39 | | | | | | | | |
| Line 5 Fryer/scrubber 1 | **0.70** | **2.80** | | | | | | | | |
| Line 5 Fryer/scrubber 2 | **0.70** | **2.80** | | | | | | | | |
| Kice filter | 0.07 | 0.29 | | | | | | | | |
| Pneumafil filter | 0.30 | 1.17 | | | | | | | | |
| Mikro-Pulsair filter | 0.15 | 0.58 | | | | | | | | |
| AMUs & space heaters | | | | | | | | | | |
| Facility Wide Emission Limit | | | | | | 99.00 | | | | 99.00 |

## Lamb-Weston, American Falls
## Process Estimated Emissions (Calculations for Table 8.1)

329 Days per Year  7896 Hours per Year

**Current Permitted Line Production**

| | | Estimated Future Production | | | | | | Estimated Emissions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | PM10 | | | VOC | | |
| | | | | | Component Production | | | Emission Factor | Emissions | | Emission Factor | Emissions | |
| | | ton/hr | ton/day | ton/yr | | ton/hr | ton/yr | lb/ton | lb/hr | ton/yr | lb/ton | lb/hr | ton/yr |
| Line 1 | Dryer & Fryer | 39.375 | 945 | 310,905 | Dryer | 39.375 | 310,905 | 0.0636 | 2.50 | 9.89 | | | |
| | | | | | Fryer (Reyco) | 39.375 | 310,905 | 0.1 | 3.94 | 15.55 | 0.031 | 1.221 | 4.82 |
| Line 2 | Dryer & Fryer | 21.25 | 510 | 167,790 | Dryer | 21.25 | 167,790 | 0.0636 | 1.35 | 5.34 | | | |
| | | | | | Fryer (Ducon) | 21.25 | 167,790 | 0.1 | 2.13 | 8.39 | 0.031 | 0.659 | 2.60 |
| Flake | 2 Dryers | 2.11 | 50.64 | 16,661 | Drum Dryer 1 | 1.055 | 8,330 | 0.0636 | 0.067 | 0.26 | | | |
| | | | | | Drum Dryer 2 | 1.055 | 8,330 | 0.0636 | 0.067 | 0.26 | | | |
| | Kice Baghouse | | | | Kice | 2.11 | 16,661 | 0.035 | 0.074 | 0.29 | | | |
| | Pneumafil Baghouse | | | | Pneumafil (Collects from 5 areas) | 2.11 | 16,661 | 0.028 | 0.30 | 1.17 | | | |
| | Mikro-Pulsaire | | | | Mikro-Pulsair (Collects from 2 areas) | 2.11 | 16,661 | 0.035 | 0.15 | 0.58 | | | |
| Line 3 | Dryer (Retrograde) & Roaster | 11.08 | 265.92 | 87,488 | Dryer (Retrograde) | 11.08 | 87,488 | 0.0636 | 0.70 | 2.78 | | | |
| | | | | | Roaster | All drying emissions are assumed to be from the retrograde. | | | | | | | |
| Line 5 | Dryer (Retrograde) & 2 Fryers | 5.43 | 130.32 | 42,875 | Dryer (Retrograde) | 5.43 | 42,875 | 0.0636 | 0.345 | 1.36 | | | |
| | | | | | Fryer 1 | 2.715 | 21,438 | 0.2 | 0.543 | 2.14 | 0.031 | 0.084 | 0.33 |
| | | | | | Fryer 2 | 2.715 | 21,438 | 0.2 | 0.543 | 2.14 | 0.031 | 0.084 | 0.33 |

**Estimated Future Production**

| | | Estimated Future Production | | | | | | Estimated Emissions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | PM10 | | | VOC | | |
| | | | | | Component Production | | | Emission Factor | Emissions | | Emission Factor | Emissions | |
| | | ton/hr | ton/day | ton/yr | | ton/hr | ton/yr | lb/ton | lb/hr | ton/yr | lb/ton | lb/hr | ton/yr |
| Line 1 | Dryer & Fryer | 39.375 | 945 | 310,905 | Dryer | 39.375 | 310,905 | 0.0636 | 2.50 | 9.89 | | | |
| | | | | | Fryer (Reyco) | 39.375 | 310,905 | 0.1 | 3.94 | 15.55 | 0.031 | 1.221 | 4.82 |
| Line 2 | Dryer & Fryer | 21.25 | 510 | 167,790 | Dryer | 21.25 | 167,790 | 0.0636 | 1.35 | 5.34 | | | |
| | | | | | Fryer (Ducon) | 21.25 | 167,790 | 0.1 | 2.13 | 8.39 | 0.031 | 0.659 | 2.60 |
| Flake | 2 Dryers | 2.11 | 50.64 | 16,661 | Drum Dryer 1 | 1.055 | 8,330 | 0.0636 | 0.067 | 0.26 | | | |
| | | | | | Drum Dryer 2 | 1.055 | 8,330 | 0.0636 | 0.067 | 0.26 | | | |
| | Kice Baghouse | | | | Kice | 2.11 | 16,661 | 0.035 | 0.07 | 0.29 | | | |
| | Pneumafil Baghouse | | | | Pneumafil (Collects from 5 areas) | 2.11 | 16,661 | 0.028 | 0.30 | 1.17 | | | |
| | Mikro-Pulsaire | | | | Mikro-Pulsair (Collects from 2 areas) | 2.11 | 16,661 | 0.035 | 0.15 | 0.58 | | | |
| Line 3 | Dryer (Retrograde) & Roaster | 11.08 | 265.92 | 87,488 | Dryer (Retrograde) | 11.08 | 87,488 | 0.0636 | 0.70 | 2.78 | | | |
| | | | | | Roaster | All drying emissions are assumed to be from the retrograde. | | | | | | | |
| Line 5 | Dryer (Retrograde) & 2 Fryers | **6.68** | **160.39** | **52,770** | Dryer (Retrograde) | **6.68** | **52,770** | 0.0636 | **0.425** | **1.68** | | | |
| | | | | | Fryer 1 | **3.34** | **26,385** | 0.2 | **0.668** | **2.64** | **0.031** | **0.104** | **0.41** |
| | | | | | Fryer 2 | **3.34** | **26,385** | 0.2 | **0.668** | **2.64** | **0.031** | **0.104** | **0.41** |

## Lamb-Weston, American Falls
## Permitted Fuel Burning (calculations for table 8.1)

### Emission Factors

| | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|
| Boiler 1 | Natural Gas | lb/MMCF | 7.6 | 0.6 | 45 | 84 | 5.5 |
| | Diesel | lb/1000 gal | 2.3 | 7.1 | 10 | 5 | 0.2 |
| | Vegetable Oil | lb/1000 gal | 1.69 | 0.11 | 12.5 | 5 | 0.13 |
| Rest of Plant | Natural Gas | lb/MMCF | 7.6 | 0.6 | 100 | 84 | 5.5 |
| | Diesel | lb/1000 gal | 2.3 | 7.1 | 20 | 5 | 0.2 |
| | Vegetable Oil | lb/1000 gal | 1.69 | 0.11 | 25 | 5 | 0.13 |

### Emissions (lb/hr)

| | Boiler Capacity | | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|---|---|
| | Btu/hr | Fuel | | | lb/hr | lb/hr | lb/hr | lb/hr | lb/hr |
| Boiler 1 | 98,500,000 | Natural Gas | MMCF/hr | 0.097 | 0.734 | 0.058 | 4.346 | 8.112 | 0.531 |
| | | Diesel | 1000 gal/hr | 0.719 | 1.654 | 5.105 | 7.190 | 3.595 | 0.144 |
| | | Vegetable Oil | 1000 gal/hr | 0.758 | 1.281 | 0.083 | 9.471 | 3.788 | 0.099 |
| | | | | Maximum | 1.654 | 5.105 | 9.471 | 8.112 | 0.531 |
| Boiler 2 | 47,180,000 | Natural Gas | MMCF/hr | 0.046 | 0.352 | 0.028 | 4.625 | 3.885 | 0.254 |
| | | Diesel | 1000 gal/hr | 0.344 | 0.792 | 2.445 | 6.888 | 1.722 | 0.069 |
| | | Vegetable Oil | 1000 gal/hr | 0.363 | 0.613 | 0.040 | 9.073 | 1.815 | 0.047 |
| | | | | Maximum | 0.792 | 2.445 | 9.073 | 3.885 | 0.254 |
| Boiler 3 | 46,726,800 | Natural Gas | MMCF/hr | 0.046 | 0.348 | 0.027 | 4.581 | 3.848 | 0.252 |
| | | Diesel | 1000 gal/hr | 0.341 | 0.784 | 2.422 | 6.821 | 1.705 | 0.068 |
| | | Vegetable Oil | 1000 gal/hr | 0.359 | 0.607 | 0.040 | 8.986 | 1.797 | 0.047 |
| | | | | Maximum | 0.784 | 2.422 | 8.986 | 3.848 | 0.252 |
| Boiler 4 | 2,500,000 | Natural Gas | MMCF/hr | 0.0025 | 0.019 | 0.0015 | 0.245 | 0.206 | 0.013 |
| Line 2 Dryer | 19,500,000 | Natural Gas | MMCF/hr | 0.0191 | 0.145 | 0.0115 | 1.912 | 1.606 | 0.105 |
| Line 3 Roaster | 7,400,000 | Natural Gas | MMCF/hr | 0.0073 | 0.055 | 0.0044 | 0.725 | 0.609 | 0.040 |
| Line 5 Retrograde | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Line 5 Fryer 1 | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Line 5 Fryer 2 | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Space Heaters | 79,670,000 | Natural Gas | MMCF/hr | 0.0781 | 0.594 | 0.0469 | 7.811 | 6.561 | 0.430 |
| | | | | **Total** | 4.15 | 10.04 | 39.64 | 26.01 | 1.70 |

365 Boiler Days
365 Production Days
150 Boiler 4 and Space Heater Days

### Emissions (ton/yr)

| | Boiler Capacity | | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|---|---|
| | Btu/hr | Fuel | | | ton/yr | ton/yr | ton/yr | ton/yr | ton/yr |
| Boiler 1 | 98,500,000 | Natural Gas | MMCF/yr | 845.94 | 3.21 | 0.25 | 19.03 | 35.53 | 2.33 |
| | | Diesel | 1000 gal/yr | 6,298 | 7.24 | 22.36 | 31.49 | 15.75 | 0.63 |
| | | Vegetable Oil | 1000 gal/yr | 6,637 | 5.61 | 0.37 | 41.48 | 16.59 | 0.43 |
| | | | | Maximum | 7.24 | 22.36 | 41.48 | 35.53 | 2.33 |
| Boiler 2 | 47,180,000 | Natural Gas | MMCF/yr | 405.19 | 1.54 | 0.12 | 20.26 | 17.02 | 1.11 |
| | | Diesel | 1000 gal/yr | 3,017 | 3.47 | 10.71 | 30.17 | 7.54 | 0.30 |
| | | Vegetable Oil | 1000 gal/yr | 3,179 | 2.69 | 0.17 | 39.74 | 7.95 | 0.21 |
| | | | | Maximum | 3.47 | 10.71 | 39.74 | 17.02 | 1.11 |
| Boiler 3 | 46,726,800 | Natural Gas | MMCF/yr | 401.30 | 1.52 | 0.12 | 20.07 | 16.85 | 1.10 |
| | | Diesel | 1000 gal/yr | 2,988 | 3.44 | 10.61 | 29.88 | 7.47 | 0.30 |
| | | Vegetable Oil | 1000 gal/yr | 3,149 | 2.66 | 0.17 | 39.36 | 7.87 | 0.20 |
| | | | | Maximum | 3.44 | 10.61 | 39.36 | 16.85 | 1.10 |
| Boiler 4 | 2,500,000 | Natural Gas | MMCF/yr | 8.82 | 0.03 | 0.003 | 0.44 | 0.37 | 0.02 |
| Line 2 Dryer | 19,500,000 | Natural Gas | MMCF/yr | 167.47 | 0.64 | 0.050 | 8.37 | 7.03 | 0.46 |
| Line 3 Roaster | 7,400,000 | Natural Gas | MMCF/yr | 63.55 | 0.24 | 0.019 | 3.18 | 2.67 | 0.17 |
| Line 5 Retrograde | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Line 5 Fryer 1 | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Line 5 Fryer 2 | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Space Heaters | 79,670,000 | Natural Gas | MMCF/yr | 281.19 | 1.07 | 0.084 | 14.06 | 11.81 | 0.77 |
| | | | | **Total** | 16.60 | 43.87 | 152.82 | 96.48 | 6.32 |

## Lamb-Weston, American Falls
## Proposed Table 8.2 Emission Inventory based on PTE

Changes shown in **BOLD**

| | PM10 | | SO2 | | CO | | VOC | | NOx | |
|---|---|---|---|---|---|---|---|---|---|---|
| | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr |
| Boiler 1 | 1.65 | 7.24 | 5.10 | 22.36 | 8.11 | 35.53 | 0.53 | 2.33 | 9.47 | 41.48 |
| Boiler 2 | 0.79 | 3.47 | 2.45 | 10.71 | 3.89 | 17.02 | 0.25 | 1.11 | 9.07 | 39.74 |
| Boiler 3 | 0.78 | 3.44 | 2.42 | 10.61 | 3.85 | 16.85 | 0.25 | 1.10 | 8.99 | 39.36 |
| Boiler 4 | 0.02 | 0.08 | 0.001 | 0.006 | 0.21 | 0.90 | 0.01 | 0.06 | 0.25 | 1.07 |
| Line 2 Dryer | 1.50 | 6.56 | 0.011 | 0.050 | 1.61 | 7.03 | 0.11 | 0.46 | 1.91 | 8.37 |
| Line 3 Roaster | 0.06 | 0.24 | 0.004 | 0.02 | 0.61 | 2.67 | 0.04 | 0.17 | 0.73 | 3.18 |
| Line 3 Retrograde | 0.70 | 3.09 | | | | | | | | |
| Line 5 Retrograde | **0.46** | **2.02** | 0.003 | 0.01 | 0.40 | 1.73 | 0.03 | 0.11 | 0.47 | 2.06 |
| Line 1 Dryer | 2.50 | 10.97 | | | | | | | | |
| Flake Dryer 1 & 2 | 0.13 | 0.59 | | | | | | | | |
| Line 1 Reyco Scrubber | 3.94 | 17.25 | | | | | 1.22 | 5.35 | | |
| Line 2 Ducon Scrubber | 2.13 | 9.31 | | | | | 0.66 | 2.89 | | |
| Line 5 Fryer/scrubber 1 | **0.70** | **3.08** | 0.003 | 0.01 | 0.40 | 1.73 | **0.13** | **0.57** | 0.47 | 2.06 |
| Line 5 Fryer/scrubber 2 | **0.70** | **3.08** | 0.003 | 0.01 | 0.40 | 1.73 | **0.13** | **0.57** | 0.47 | 2.06 |
| Kice filter | 0.07 | 0.32 | | | | | | | | |
| Pneumafil filter | 0.30 | 1.29 | | | | | | | | |
| Mikro-Pulsair filter | 0.15 | 0.65 | | | | | | | | |
| AMUs & space heaters | 0.59 | 2.60 | 0.047 | 0.21 | 6.56 | 28.74 | 0.43 | 1.88 | 7.81 | 34.21 |
| Fugitive Dust | 3.54 | 7.91 | | | | | | | | |
| Facility Wide Potential | | **83.19** | | 43.99 | | 99.00 | | **16.60** | | 99.00 |
| **Change** | | **1.45** | | | | | | **0.17** | | |

## Lamb-Weston, American Falls
## Process PTE (Calculations for Table 8.2)

365 Days per Year  8760 Hours per Year

**Current Permitted Line Production**

| | | Estimated Future Production | | | | | | Estimated Emissions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | PM10 | | | VOC | | |
| | | | | | Component Production | | | Emission Factor | Emissions | | Emission Factor | Emissions | |
| | | ton/hr | ton/day | ton/yr | | ton/hr | ton/yr | lb/ton | lb/hr | ton/yr | lb/ton | lb/hr | ton/yr |
| Line 1 | Dryer & Fryer | 39.375 | 945 | 344,925 | Dryer | 39.375 | 344,925 | 0.0636 | 2.504 | 10.97 | | | |
| | | | | | Fryer (Reyco) | 39.375 | 344,925 | 0.1 | 3.938 | 17.25 | 0.031 | 1.221 | 5.35 |
| Line 2 | Dryer & Fryer | 21.25 | 510 | 186,150 | Dryer | 21.25 | 186,150 | 0.0636 | 1.352 | 5.92 | | | |
| | | | | | Fryer (Ducon) | 21.25 | 186,150 | 0.1 | 2.125 | 9.31 | 0.031 | 0.659 | 2.89 |
| Flake | 2 Dryers | 2.11 | 50.64 | 18,484 | Drum Dryer 1 | 1.055 | 9,242 | 0.0636 | 0.067 | 0.29 | | | |
| | | | | | Drum Dryer 2 | 1.055 | 9,242 | 0.0636 | 0.067 | 0.29 | | | |
| | Kice Baghouse | | | | Kice | 2.11 | 18,484 | 0.035 | 0.074 | 0.32 | | | |
| | Pneumafil Baghouse | | | | Pneumafil (Collects from 5 areas) | 2.11 | 18,484 | 0.028 | 0.295 | 1.29 | | | |
| | Mikro-Pulsaire | | | | Mikro-Pulsair (Collects from 2 areas) | 2.11 | 18,484 | 0.035 | 0.148 | 0.65 | | | |
| Line 3 | Dryer (Retrograde) & Roaster | 11.08 | 265.92 | 97,061 | Dryer (Retrograde) | 11.08 | 97,061 | 0.0636 | 0.705 | 3.09 | | | |
| | | | | | Roaster | All drying emissions are assumed to be from the retrograde. | | | | | | | |
| Line 5 | Dryer (Retrograde) & 2 Fryers | 5.43 | 130.32 | 47,567 | Dryer (Retrograde) | 5.43 | 47,567 | 0.0636 | 0.345 | 1.51 | | | |
| | | | | | Fryer 1 | 2.715 | 23,783 | 0.2 | 0.543 | 2.38 | 0.031 | 0.084 | 0.37 |
| | | | | | Fryer 2 | 2.715 | 23,783 | 0.2 | 0.543 | 2.38 | 0.031 | 0.084 | 0.37 |
| | | | | | | | **Total Current Permit** | | **12.71** | **55.65** | | **2.05** | **8.97** |

365 Days per Year  8760 Hours per Year

**Estimated Future Production**

| | | Estimated Future Production | | | | | | Estimated Emissions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | PM10 | | | VOC | | |
| | | | | | Component Production | | | Emission Factor | Emissions | | Emission Factor | Emissions | |
| | | ton/hr | ton/day | ton/yr | | ton/hr | ton/yr | lb/ton | lb/hr | ton/yr | lb/ton | lb/hr | ton/yr |
| Line 1 | Dryer & Fryer | 39.375 | 945 | 344,925 | Dryer | 39.375 | 344,925 | 0.0636 | 2.504 | 10.97 | | | |
| | | | | | Fryer (Reyco) | 39.375 | 344,925 | 0.1 | 3.938 | 17.25 | 0.031 | 1.221 | 5.35 |
| Line 2 | Dryer & Fryer | 21.25 | 510 | 186,150 | Dryer | 21.25 | 186,150 | 0.0636 | 1.352 | 5.92 | | | |
| | | | | | Fryer (Ducon) | 21.25 | 186,150 | 0.1 | 2.125 | 9.31 | 0.031 | 0.659 | 2.89 |
| Flake | 2 Dryers | 2.11 | 50.64 | 18,484 | Drum Dryer 1 | 1.055 | 9,242 | 0.0636 | 0.067 | 0.29 | | | |
| | | | | | Drum Dryer 2 | 1.055 | 9,242 | 0.0636 | 0.067 | 0.29 | | | |
| | Kice Baghouse | | | | Kice | 2.11 | 18,484 | 0.035 | 0.074 | 0.32 | | | |
| | Pneumafil Baghouse | | | | Pneumafil (Collects from 5 areas) | 2.11 | 18,484 | 0.028 | 0.295 | 1.29 | | | |
| | Mikro-Pulsaire | | | | Mikro-Pulsair (Collects from 2 areas) | 2.11 | 18,484 | 0.035 | 0.148 | 0.65 | | | |
| Line 3 | Dryer (Retrograde) & Roaster | 11.08 | 265.92 | 97,061 | Dryer (Retrograde) | 11.08 | 97,061 | 0.0636 | 0.705 | 3.09 | | | |
| | | | | | Roaster | All drying emissions are assumed to be from the retrograde. | | | | | | | |
| Line 5 | Dryer (Retrograde) & 2 Fryers | **6.68** | **160.394** | **58,544** | Dryer (Retrograde) | **6.68** | **58,544** | 0.0636 | **0.425** | **1.86** | | | |
| | | | | | Fryer 1 | **3.34** | **29,272** | 0.2 | **0.668** | **2.93** | 0.031 | **0.104** | **0.45** |
| | | | | | Fryer 2 | **3.34** | **29,272** | 0.2 | **0.668** | **2.93** | 0.031 | **0.104** | **0.45** |
| | | | | | | | **Total Permit Change** | | **13.04** | **57.10** | | **2.09** | **9.14** |
| | | | | | | | **Total Current Permit** | | **12.71** | **55.65** | | **2.05** | **8.97** |
| | | | | | | | **Change** | | **0.33** | **1.45** | | **0.04** | **0.17** |

## Lamb-Weston, American Falls
## Fuel Burning PTE (Calculations for Table 8.2)

### Emission Factors

| | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|
| Boiler 1 | Natural Gas | lb/MMCF | 7.6 | 0.6 | 45 | 84 | 5.5 |
| | Diesel | lb/1000 gal | 2.3 | 7.1 | 10 | 5 | 0.2 |
| | Vegetable Oil | lb/1000 gal | 1.69 | 0.11 | 12.5 | 5 | 0.13 |
| Rest of Plant | Natural Gas | lb/MMCF | 7.6 | 0.6 | 100 | 84 | 5.5 |
| | Diesel | lb/1000 gal | 2.3 | 7.1 | 20 | 5 | 0.2 |
| | Vegetable Oil | lb/1000 gal | 1.69 | 0.11 | 25 | 5 | 0.13 |

### Emissions (lb/hr)

| | Boiler Capacity | | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|---|---|
| | Btu/hr | Fuel | | | lb/hr | lb/hr | lb/hr | lb/hr | lb/hr |
| Boiler 1 | 98,500,000 | Natural Gas | MMCF/hr | 0.097 | 0.734 | 0.058 | 4.346 | 8.112 | 0.531 |
| | | Diesel | 1000 gal/hr | 0.719 | 1.654 | 5.105 | 7.190 | 3.595 | 0.144 |
| | | Vegetable Oil | 1000 gal/hr | 0.758 | 1.281 | 0.083 | 9.471 | 3.788 | 0.099 |
| | | | | Maximum | 1.654 | 5.105 | 9.471 | 8.112 | 0.531 |
| Boiler 2 | 47,180,000 | Natural Gas | MMCF/hr | 0.046 | 0.352 | 0.028 | 4.625 | 3.885 | 0.254 |
| | | Diesel | 1000 gal/hr | 0.344 | 0.792 | 2.445 | 6.888 | 1.722 | 0.069 |
| | | Vegetable Oil | 1000 gal/hr | 0.363 | 0.613 | 0.040 | 9.073 | 1.815 | 0.047 |
| | | | | Maximum | 0.792 | 2.445 | 9.073 | 3.885 | 0.254 |
| Boiler 3 | 46,726,800 | Natural Gas | MMCF/hr | 0.046 | 0.348 | 0.027 | 4.581 | 3.848 | 0.252 |
| | | Diesel | 1000 gal/hr | 0.341 | 0.784 | 2.422 | 6.821 | 1.705 | 0.068 |
| | | Vegetable Oil | 1000 gal/hr | 0.359 | 0.607 | 0.040 | 8.986 | 1.797 | 0.047 |
| | | | | Maximum | 0.784 | 2.422 | 8.986 | 3.848 | 0.252 |
| Boiler 4 | 2,500,000 | Natural Gas | MMCF/hr | 0.0025 | 0.019 | 0.0015 | 0.245 | 0.206 | 0.013 |
| Line 2 Dryer | 19,500,000 | Natural Gas | MMCF/hr | 0.0191 | 0.145 | 0.0115 | 1.912 | 1.606 | 0.105 |
| Line 3 Roaster | 7,400,000 | Natural Gas | MMCF/hr | 0.0073 | 0.055 | 0.0044 | 0.725 | 0.609 | 0.040 |
| Line 5 Retrograde | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Line 5 Fryer 1 | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Line 5 Fryer 2 | 4,800,000 | Natural Gas | MMCF/hr | 0.0047 | 0.036 | 0.0028 | 0.471 | 0.395 | 0.026 |
| Space Heaters | 79,670,000 | Natural Gas | MMCF/hr | 0.0781 | 0.594 | 0.0469 | 7.811 | 6.561 | 0.430 |
| | | | | **Total** | 4.15 | 10.04 | 39.64 | 26.01 | 1.70 |

365 Boiler Days
365 Production Days
365 Boiler 4 and Space Heater Days

### Emissions (ton/yr)

| | Boiler Capacity | | | | PM10 | $SO_2$ | $NO_X$ | CO | VOC |
|---|---|---|---|---|---|---|---|---|---|
| | Btu/hr | Fuel | | | ton/yr | ton/yr | ton/yr | ton/yr | ton/yr |
| Boiler 1 | 98,500,000 | Natural Gas | MMCF/yr | 845.94 | 3.21 | 0.25 | 19.03 | 35.53 | 2.33 |
| | | Diesel | 1000 gal/yr | 6,298 | 7.24 | 22.36 | 31.49 | 15.75 | 0.63 |
| | | Vegetable Oil | 1000 gal/yr | 6,637 | 5.61 | 0.37 | 41.48 | 16.59 | 0.43 |
| | | | | Maximum | 7.24 | 22.36 | 41.48 | 35.53 | 2.33 |
| Boiler 2 | 47,180,000 | Natural Gas | MMCF/yr | 405.19 | 1.54 | 0.12 | 20.26 | 17.02 | 1.11 |
| | | Diesel | 1000 gal/yr | 3,017 | 3.47 | 10.71 | 30.17 | 7.54 | 0.30 |
| | | Vegetable Oil | 1000 gal/yr | 3,179 | 2.69 | 0.17 | 39.74 | 7.95 | 0.21 |
| | | | | Maximum | 3.47 | 10.71 | 39.74 | 17.02 | 1.11 |
| Boiler 3 | 46,726,800 | Natural Gas | MMCF/yr | 401.30 | 1.52 | 0.12 | 20.07 | 16.85 | 1.10 |
| | | Diesel | 1000 gal/yr | 2,988 | 3.44 | 10.61 | 29.88 | 7.47 | 0.30 |
| | | Vegetable Oil | 1000 gal/yr | 3,149 | 2.66 | 0.17 | 39.36 | 7.87 | 0.20 |
| | | | | Maximum | 3.44 | 10.61 | 39.36 | 16.85 | 1.10 |
| Boiler 4 | 2,500,000 | Natural Gas | MMCF/yr | 21.47 | 0.08 | 0.006 | 1.07 | 0.90 | 0.06 |
| Line 2 Dryer | 19,500,000 | Natural Gas | MMCF/yr | 167.47 | 0.64 | 0.050 | 8.37 | 7.03 | 0.46 |
| Line 3 Roaster | 7,400,000 | Natural Gas | MMCF/yr | 63.55 | 0.24 | 0.019 | 3.18 | 2.67 | 0.17 |
| Line 5 Retrograde | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Line 5 Fryer 1 | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Line 5 Fryer 2 | 4,800,000 | Natural Gas | MMCF/yr | 41.22 | 0.16 | 0.012 | 2.06 | 1.73 | 0.11 |
| Space Heaters | 79,670,000 | Natural Gas | MMCF/yr | 684.22 | 2.60 | 0.205 | 34.21 | 28.74 | 1.88 |
| | | | | **Total** | 18.18 | 43.99 | 173.60 | 113.94 | 7.46 |